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## **ABSTRACT**

## Process for the fractionation of mixtures of phthalocyanine dyes

Process for forming an image on a substrate comprising applying an ink thereto by means of an ink-jet printer wherein the ink comprises a liquid medium and a phthalocyanine dye fraction obtainable by the fractionation of a solution and/or suspension of a mixture of phthalocyanine dyes of Formula (1), and salts thereof, by cross-flow filtration:

 $MPc \underbrace{ (SO_3H)_x}_{(SO_2NR^1R^2)_y}$ 

## Formula (1)

wherein:

M is 2H, copper or nickel;

Pc represents a phthalocyanine nucleus;

R<sup>1</sup> and R<sup>3</sup> independently are H or optionally substituted C<sub>1-4</sub>alkyl;

R<sup>2</sup> and R<sup>4</sup> independently are H or optionally substituted hydrocarbyl; or

R<sup>1</sup> and R<sup>2</sup>, and, R<sup>3</sup> and R<sup>4</sup>, independently, together with the nitrogen atom to which they are attached represent an optionally substituted aliphatic or aromatic ring system;

x is 0 to 3.9;

y is 0 to 3.9;

z is 0.1 to 4; and

25 the sum of (x+y+z) is 2.4 to 4.5.